/569 cont./

22 At this time also the seals guard their newly born young on the beach and are easy to get at (p. 39 /untranslated/).

The gathering activity of the woman is somewhat more dependent on the various seasons. This, obviously, applies first of all to the hunt for berries which ripen in late summer and in the fall. Cytraria harioti can be picked in the fall and in the first half of winter. With the beginning of summer Cytraria darwinii are also matured and remain on the trees until shortly before the end of winter. The cold season is not suitable for fishing with a line (313). On the other hand, sea urchins (Echinodermum) taste

313. Bridges (j) 55 referred to "many kinds of smaller yet valuable fish, chiefly plentiful through summer and autumn and early winter"/cited in English/. Hyades (q) 350 also confirm this. See footnote 290.

best in July and August, that is, toward the end of winter. In the spring girls and women busily hunt for birds' eggs as long as the opportunity lasts. They rejoice when the terrors of winter are past and the providing of food is made easier for them by the warmer season.

221 262 The variety that the Yamana family can count on in obtaining food is limited in these few details. Their safest supplementary source throughout the entire year is the inexhaustible amount of Mytilus mussels. All Indian women can successfully dip into this source when there is no other prospect. Despite all this, the family is not spared a few days of hunger if in some spot even the supply of mussels is exhausted and they cannot proceed elsewhere because of bad weather. As we have said, mussels have the same importance for the Yamana as bread has for Europeans, and they tire of them just as little as Europeans do of bread. Finally, we should like to remind the reader that the individual periods of the whole year are determined according to the various stages of development of Cytraria darwinii. This does not mean, however, that this fungus contributes to any extent to the diet of our Indians (p. 277). Despite the very slight variation, the monotony of a meat diet exclusively continues all during the year.

• [P05]

1; Gamble--TTT E-S (1918-1936) 1937 USE Telgas 1956

/306 cont./

without interruption. Although he does not exert any noticeable pressure and does not in any way state his requests to individuals as though he were commanding them, nevertheless no one would ignore a wish that he expressed. If a participant should not like something, he is always free to withdraw from the *fiesta*.

In the Great Hut one can sometimes see amazing examples of powerful self-control. Occasionally one person will subordinate himself to another or this one will get together with that one, although formerly both were bitter enemies. Everyone puts aside all personal considerations if service for the community or the launching of a common enterprise demands it. For example, shortly before the beginning of the *fiesta* in March, 1932, Calderon had a serious disagreement with Santiago who was much older, but Santiago had scarcely initiated the preparations as the leader before Calderon, too, was following his slightest suggestion. When he was asked about the sudden change in his behavior, Calderon frankly admitted: "The rule is that among us Tarasca everyone in the *fiesta* must obey absolutely!"

Dependence on the leader is all the more necessary since there are no definitely determined, specific divisions of the day. There are, of course, general regulations, but the Tarasca do not decide beforehand what is going to take place at one hour and what at another, what is to come up now or later, how each one is to conduct himself. In this celebration, too, our Tarasca are true creatures of the moment, entirely dependent upon their moods. It would be unthinkable and a hopeless undertaking to try to put our freedom-loving Indians on a kind of schedule. The leader is, so to speak, constantly present in a supervisory capacity. He superintends the running /307/ of the whole, directs one person here, another there, and demands this or that service. It is due to the unconditional obedience with which every participant submits that the initiation proceeds without friction.

Throughout the weeks of the *fiesta* a varied ceremonial runs its course, which has probably taken shape as a result of the natural disposition of the Tarasca. Above all they demand the facial painting (p.TTT) without which no one formerly was allowed to sit in the Great Hut. A person who offers something or who has accepted something must observe a fixed formula. For example, the *cihuatlo* who bring the fruits of their hunting or gathering into

/1403 cont./

as long as possible. The outward peace which prevails in nature has a favorable effect on the psychic state of the ~~shaman~~, they consciously take this into consideration. This ~~state~~ continues for several months. Sometimes it is prolonged if, according to the opinion of the masters, the apprentices' progress is slow. It is strange, in view of the restless disposition of our Yamana, that the medicine men are able to remain in one place for several months in pursuit of their goal, although day after day they are forced to maintain a uniform attitude and strict control of their mental powers.

β The Procedure

All fully qualified participants, the really active ~~shaman~~ and the apprentices, must remain in the ~~house~~ house uninterruptedly. They may not even leave it in order to work for any length of time in the family hut or to sleep there. All distractions cease during the entire period, the daily program itself serves to maintain serious concentration. The participants remain in their places all the time. Toward four o'clock, when it begins to grow dark, the general singing starts. It continues without pause "until the two Pleiades have crossed their highest point on the heavens" /1404/ that is, until two or three o'clock. It is not until then that everyone may go to sleep. As soon as the dawn appears, everyone duties off sleep and collects his thoughts, tortoises, until after the sun has crossed the zenith. Then, on certain days, a few chosen begin for the ~~shaman~~, which they perform silently. The purpose of these chores is to give them the physical exercise that nature requires, although they need sleep even more. They put the hut fire and their sleeping places in order or gather firewood in the forest and pile it up in front of the Great Hut. Some of them, led by women, go down to the shore and look for mussels. About three hours are permitted for these occupations. After that everyone sits down in his place and, without moving, gives himself up to meditation. This program continues day after day without change, always with the greatest composure and strict silence.

/last? cont./

earlier, he remains silent and motionless, sometimes he turns his head gently to the left and at the same time utters a barely perceptible [illegible]. Compare Hyades (p.)67.

b. Time Designations

The differences between day and night and between one season and the next are too great for our Tongans not to have designated them with special words. They do not have an expression corresponding exactly to "day"; they use [illegible] a light, brightness. From this they derive the much used [illegible] daily, and a number of other compounds. Compare BD:251. Although the Tonaans do not have a definite division of time in hours, they divide the day into sections of about four hours. They say [illegible] or [illegible] tupuna for the time from dawn to the time when the sun is about halfway to the zenith, that is, about ten o'clock. The basic meaning of [illegible] is "dawn." BD: 160 gives tupuna as "to spread as light does so that day is spread about" /cited in English/. This is followed by [illegible], zenith, from ten to two o'clock. Compare [illegible], "to come over..." /cited in English/ in BD:610. Then comes [illegible], the afternoon, the time to about six o'clock. BD:181 gives [illegible], "to get dinner, to go a long way off" /cited in English/. This is followed by [illegible], the time of evening twilight until about nine o'clock. The Tonaans are familiar with all these expressions.

They also divide up the night. The above-mentioned [illegible] is followed by [illegible], the time from the first darkness to midnight. This is followed by the period [illegible], from midnight to about three o'clock. Finally there is [illegible], the time when it grows light in the morning, between three and seven o'clock. Although these expressions are universally understood, an expert on the stars will now and then also indicate the time of night by their position in the sky.

The Tonaans divide the year into definitely recognizable, though not sharply separated periods which they appropriately call seasons. Nature appears in a different garb four times, the change

/1447 cont./

being very apparent. Therefore, our Fuegians speak of four seasons. The word ŕrna means "spring". BD:61 writes ŕrina, "spring, season of spring" /cited in English/. The word kíni is "summer"; hákinúf is "autumn." The latter word is a combination of hkéin, "green beech of summer" (Nothofagus pumilio), and hif, "red," in other words: time of the red-colored beech leaves. The word íns means "winter." Compare BD:3 and the word yéhan, "the early part of winter" /cited in English/, in BD:638. The above designations are used in various word combinations, for example, hákuŕrna, "next spring," and hákukíni, "next summer." Compare BD:262 and Bridges (I):25. The general concept "season" is not absent. BD:61 also gives ŕrum, "season, time" /cited in English/. The Yamana, therefore, favor the following division of the year:

/1448/ hŕkuŕrum: "the time when the bark is loose," when the sap rises in the beech trunks and the bark is easily peeled off. This means early spring, September and October, when the first shoots come out. A person who wants to know "whether the bark is already loose," listens for the sound čgk, čgk, the call of the great or the small snipe, known as čgkána or yčllakatčr. This call sounds exactly like the noise one makes when he loosens a strip of bark, tearing it off with a sharp pull. The word čgkána is probably related to čika, "to make canoe" /cited in English/, in BD:132. BD:270 also gives hákuaŕrum, "the early season for making spring canoes early in October" /cited in English/.

ŕrne: "the time when one finds the first birds' eggs," the height of spring. A person who now finds the first fresh egg breaks it open and with the yolk draws a vertical line across his forehead and the bridge of his nose as a sign of joy (p. 986). At this time, also, everyone combs the shore for haigŕuf, the sea anemone (Actiniaria). He rejoices if he finds particularly luminous colonies of these small animals, for to him they are harbingers of spring (p. 985). BD:61 also gives ŕriaŕrum, "very early in spring" /cited in English/. They are not satisfied, however, with a single indication of spring's arrival. A reliable sign is the ascending sun. A person who knows how to observe it keeps careful watch for a few days through a small hole at a particular spot in his hut, always holding his body in the same position. If he has proved to himself that the sun is ascending, he also concedes the other indications

/1448 cont./

805 mentioned above and joyfully announces to the whole neighborhood: "Spring is here!"

kísi: "the time when birds' eggs are heavy," because the birds are already sitting on their eggs and the embryo is developing. This means early summer.

hĕx-lakĕšdára: "the time when birds' eggs are empty," for hatching is over. This is the beginning of midsummer. This term is nothing more than a combination of hĕx, "egg," and lakĕšdára, "to be empty." BD:281 says more briefly, "lākŏšdāra, the season of the year when empty shells are in the nests, answering to January" /cited in English/.

auiyalémpi: "the time when young birds happily stretch and expand," for their large wing feathers are forming and they will soon be able to fly. The height of summer. This word, according to BD:64, 280, is made up of auiya, "the young of any animals or birds" /cited in English/, and lómpi, "to lie or sit down in the sun to enjoy its heat" /cited in English/.

hánislus: "the time of the red-colored beech leaves," autumn proper, the whole of March. Now the female otters with their young come back to the coast from the brooks and lagoons in the interior of the islands, to where the male animals stayed throughout.

stajyákin: "the time of the first snow," early winter, April and May. Snow first falls in the mountains, then advances in deeper layers, and finally reaches the coast. A thin coat of ice covers brooks and lagoons. /1449/ Now all the mammals and birds are fat, the marine animals particularly tasty, and hunting profitable for these eight weeks.

lémkumĕči: "the time when the sun goes west," that is, when it stays longest in the west or north, the time of year around the solstice when the days are shortest. This word is a simple compound of lém, "the sun," and kumŏči, "to enter going W." /cited in English/, according to BD:210. The time of deepest winter. The Yamana explain: "The sun-man hides in his dwelling and under the huge mass of snow; he wants to conceal from the people that he will again return." Some of the older men watch the lengthening days with particular attention. They pass on their observations, and their assurances awaken loud expressions of joy. Hunting is still very good.

/1449 cont./

805 These eight periods form the complete cycle of the year. In order to mark them off approximately, the Yamana at the same time observe the position of certain stars. They wish to prove that their position in the heavens coincides with the corresponding events here on earth. The position of the sun and conspicuous weather conditions are decisive. In order to emphasize these movements of the sun, the Yamana use the word ūsiāgulū, "time of return of the sun E.ward after midwinter" /cited in English/, according to BD:104. Or the word lēkilla, "strong S. or SW. winds accompanied with rain and sleet prevalent at the break up of winter" /cited in English/, according to BD:283. Furthermore, the word hauwōlāmūka, "the late autumn, early winter, referring to the snowy, overcast, dull weather then prevalent" /cited in English/, according to BD:274. The Yamana even use conspicuous phenomena connected with certain species of animals to characterize the seasons. They point to hakuáluš (p. 985); they use iūan, "the time of the young crabs, Oct. and Nov." /cited in English/, according to BD:11. Finally, they speak of lūkāšun, "shell time when the young birds are hatched, i.e., January" /cited in English/, according to BD:281.

805 824 Even regular changes in vegetation, especially in fungi, serve the Yamana for determining the season. They use the word tīindeka, "the time of the withering of plants, i.e., early winter" /cited in English/, according to BD:387. The expression based on the growth of aušíx, Cyttaria darwinii, is a great favorite. According to BD:64 this fungus is "the chief summer fungus" /cited in English/, which grows on the knobby parts of beech branches (Fig. 8 /in untranslated portion/). The general term is ešēf; the mature stage is called aušíx (p. 276).

aušíx manačigē-a: the fungus when it has just appeared.

aušíx kálala, the fungus to its maximum size.

aušíx ūpa, the fungus tastes sweet, its surface is still smooth.

aušíx tanē-a, the fungus with its surface riddled with holes.

aušíx agēnadēr, the fungus with loosened hyphae, which falls off easily.

aušíx tupíana, almost all fungi have fallen off, but are still somewhat soft.

/1449 cont./

805 824 aušíx málaku, the fungi lying on the moist forest floor are turning black and beginning to rot.

/1450/ The development of Cyttaria darwinii described above takes place from the beginning of December to the end of February. The growing period of the smaller Cyttaria harioti, ašim (p. 277), also serves to determine time.

maxínix is the name of this tiny fungus when it appears in January.

kétexna is its name as long as its surface is still smooth at maximum size.

kétexna ášex is the fallen, decayed fungus. This development takes place from January to the end of April. The Yamana refer in the same way to the various stages of development of the large tree fungus, šman, and divide up the first half of winter accordingly.

805 As is evident, the Yamana have a number of time designations, each of which is connected with phenomena in their immediate environment. Besides the expressions just mentioned, one also hears the following: "I'll come [illegible] when the first green shoots appear, -- when the young súrla crawl out of their shells, -- when the kímoa are ready to fly, -- when the red beech leaves fall, -- when the water [in the channel] becomes brown (355), -- when the mussels are poor" (356). These

355. Actually, only the algae change color in the spring; the Yamana expression makes it appear as though the water changed color.

356. This means departing winter.

expressions are simple and perfectly clear to everyone.

3. Astronomy

824 The appearance and disappearance of a number of stars and their highest and lowest positions likewise characterize the individual periods in the yearly cycle. In former times, before

/1451 cont./

phases. Thus, hámuxa tajyígata is the full moon; akuklíra, the completely invisible new moon; yírum hámuxa, the waxing moon; and, finally, hámuxa héjiu, the waning moon. The word héjiu is probably the same as haiši, "another, the other" /cited in English/, in BD:262. There are also other designations in BD for the phases of the moon. The Yamana like to measure time by the whole course of the moon. For example, someone will say: "Yírum hámuxa ištja-muí har-t-hajnáa. I shall come again at the new moon" (357).

357. Hyades (p):360 and Spegazzini (a):169 also briefly referred to the various designations of time used by the Yamana.

As a result of their nomadic life, our Yamana are obliged to observe carefully the extremely changeable weather of their country and to interpret reliably every peculiar phenomenon. In the course of long experience they have attained positive mastery in this, and one can absolutely rely on their opinion. In their observations they usually take two or three phenomena into account at once, not least the behavior of animals. Nevertheless, a family will sometimes be overtaken by a sudden change in the weather and their lives endangered. The Yamana certainly do not lack expressions for individual aspects of the weather. Thunder, kúkika, is almost never heard in that region; our Fuegians have no definite explanation for it or for lightning (p. 21 /untranslated/) which is just as rare.

4. Geographical Knowledge

On their constant trips through the tortuous channels of the Cape Horn Archipelago our Yamana are confidently sure of themselves because they have a well developed sense of orientation to the quarters of the heavens. They have a wide choice of terms for them. /1452/ The basic terms are: ítu, íla, "the south, southward"; ítu íta, "east, in an easterly direction";

1: Gusinde--1930 S-5 (1918-1924) 1937 . S98 Yahgan 9986

/1433 cont./

§23 They are aided by a no less reliable and very accurate knowledge of places which they acquire by their frequent visits to each locality. Their memory of places is refreshed every time they take a canoe trip or stay anywhere. Thus one thing explains the other. Actually, the region comprising their native land, which every family constantly traverses, is not very extensive. They go beyond these boundaries only on special occasions and then they let themselves be guided by a family native to that region. Moreover, thanks to the excellent gift for observation with which our Fuegians are equipped, old and young really know every nook and rock, every inlet and coast, every brook and beach. The story of the origin of the many wide and narrow, quite irregular channels that make the whole Cape Horn Archipelago look like a land savagely torn to pieces is told in the tale about the Lalawája rock (p. 1216 /untranslated/); the origin of the little brooks running down from the hills and mountains is explained in the Čilawája-wátowa (p. 1207 /untranslated/). legend even tells about the origin of the magnificent glaciers, known as dágo, in Bruno Nordeenz (p. 1273 /untranslated/).

§85 §23 Contrasted with this wealth of place names, the lack of designations expressing distances, intervals, and time is all the more striking. They usually refer to the position of the sun or the stars in order to determine the approximate time of day or night. Such estimates, of course, leave a wide margin of uncertainty which disturbs the Fuegian not at all. On his journeys and canoe trips he is, in any case, dependent on the quite unpredictable influences /1434/ of natural forces. He never knows beforehand how they will affect him. These unbridled natural forces to which he is exposed are stronger than he; hence it would be senseless to set a goal to be reached in a short time under any circumstance. If our Fuegian wishes to designate a great distance, he speaks of two or three or many travel-days and estimates from six to eight hours for a single day of the journey. He does not lose or gain anything worth mentioning whether he reaches his goal sooner or later. In a most literal sense, no hour strikes to mar a person's happiness down there in the Cape Horn Archipelago!

2: Cooper E-4 (no date) 1946 SH6 Yahgan SH6

of spirits (pl. III, c). So decked out, they sang and danced in the sight of the women and children and threatened the women with dire penalties if they did not remain submissive to the will of the men.

MYTHOLOGY

Full details on the cosmogony and mythology of the *Yahgan* have been presented by Gusinde (1937, pp. 1139–1277), with further information on certain of the more important folklore beings (1937, pp. 1278–1284). Perhaps the most important single phase of the mythology is the Yoŏlox cycle. The elder of the two Yoŏlox brothers was stupid, the younger, clever. The younger is in a general sense the culture hero. He is not a trickster. The cosmogonic myths include a flood story. There are a great many explanatory tales of the cormorant, the otter, the fox, and so forth. A number of other stories were told with the moral purpose of instructing and warning the young. Certain others concern the medicine man. The long story of the earlier matriarchate was briefly summarized *supra* under Kina rite with which it was associated, just as the Yoŏlox cycle was more or less associated with the čiéxana. The chief folklore beings believed in, but to whom no cult was given, were the dreaded cannibal beings, the Lukúmai water spirits, and the Hánnush giants.

LORE AND LEARNING

In general, *Yahgan* technology, with the exception of the bark canoe and allied basketry, gives little indication of inventive strivings. Thus they stand in sharp contrast with their Arctic counterparts, the Eskimo. A comparison for instance between the very simple *Yahgan* harpoons and the very elaborate Eskimo ones shows the sharpest contrast. In this respect *Yahgan* culture resembles more closely the culture of the northern *Athabaskan* and northern *Algonquian* of sub-Arctic America.

There were no weights and measures of any kind. There were no means of communication such as knotted cords, notched sticks, or, so far as our records go, of travelers' signs, such as the inclined stick to show direction of journey. Smoke signals were made by putting branches of *Nothofagus betuloides* on the fire and, when the dense smoke had risen about 16 feet (5 m.) high, quickly extinguishing the fire, allowing a balloonlike cloud of smoke to ascend. One such smoke signal signified sickness or an accident; two, a grave emergency; three, a death; four, the discovery of a stranded whale.

The day was divided into periods of about 4 hours each. The year was divided into four seasons corresponding roughly to our own, and also into eight divisions: "the time when the bark is loose," "when the first bird eggs were found," and so forth.